Owners Manual

Virtue™ one™ and two™

Document Revision 2.1

Reference grade integrated two-channel amplifier
Powered by Tripath™ technology

Purchased from Dealer:	Serial Number:
Purchase Date:	
Invoice Number:	

Welcome

We started Virtue in 2005 with the dream of bringing the sensory experience of the high-end audio to the masses. Welcome to our family! If you're already an audiophile, you know already that this amplifier is one of the best sounding, highest value audio products ever made. If you simply like listening to good music, we hope to help you appreciate of accurate sound reproduction and museum-caliber build quality. When you do, you'll be an audiophile.

Virtue is a principle-driven company. Here are some of the rules we live by:

- Life is too short for bad audio. Make audio lovers audiophiles.
- If it's not overbuilt, it can be made better. Overbuild.
- Provide a transporting sensory experience through sight, touch, and sound.
- Make a product too attractive to be hidden in a cabinet.
- Build it no bigger than it needs to be, but no smaller.
- Make sure that ten is "loud enough" but go all the way to eleven regardless.
- Establish Virtue as the highest value brand in the industry.
- Provide a completely satisfying buying experience.
- Live up to the Virtue name in every product and every way, every day.

We hope that you get a lifetime of enjoyment from your Virtue amplifier. Let this guide show you how. We'll cover:

- What's in the box
- Setting up your amplifier
- Deployment options
- Trouble-shooting
- Specifications
- Warranty
- Trademarks

If you are have any questions whatsoever about the amplifier, please submit feedback on our website. Go to **http://www.virtueaudio.com** , click on "**Us**" and then specify "**Product Question**" or "**Product Issue**" in the message form.

What's in the box

You will find 4 items in the box.

Please note that we changed the name of the product from "audiophile" to "virtue" but the box was not reprinted.

1. Virtue ONE or TWO amplifier

2. Power Supply unit (PSU)

3. AC power cord

4. Volume knob
(must be attached, preferably glued)

Setting up your amplifier

We bubble wrap several of the amplifier parts to protect them during long-distance shipping. After unwrapping the parts, you should be up and running within 5 minutes. You will then need to:

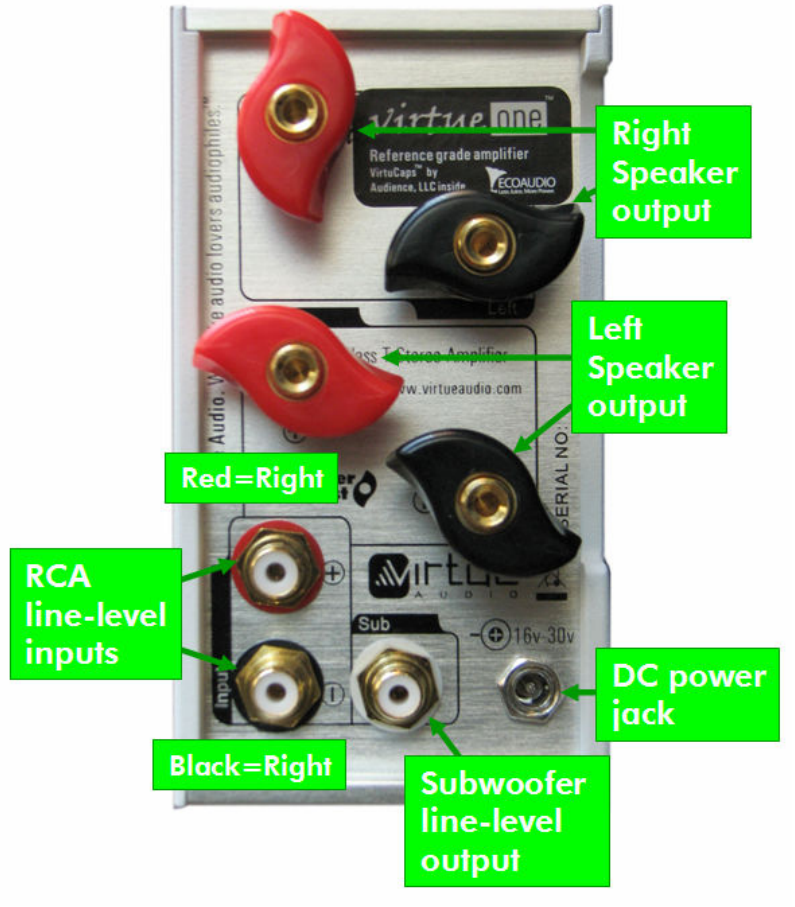
1) Attach the volume knob
2) Connect the signal and speaker cables
3) Plug in power
4) Turn on!

Attach the volume knob

After unwrapping the amplifier and the volume knob, you must attach the volume knob, which is shipped separately to minimize possible damage to the POT/attenuator. The volume knob will not always be tight enough to avoid dropping off. We recommend putting a drop of super-glue into the inner plastic bushing and then immediately pressing on the knob. The flat part on the bushing should correspond with the flat part of the POT/attenuator shaft.

Plug in audio inputs and outputs

The following diagram shows how the unit is configured for stereo (2 channel) play.



For use as a mono-block amplifier, simply use one channel of the amplifier (left or right). The unit will automatically dedicate all available current to the channel you choose: left, right or both (if both channels are attached). That's it.

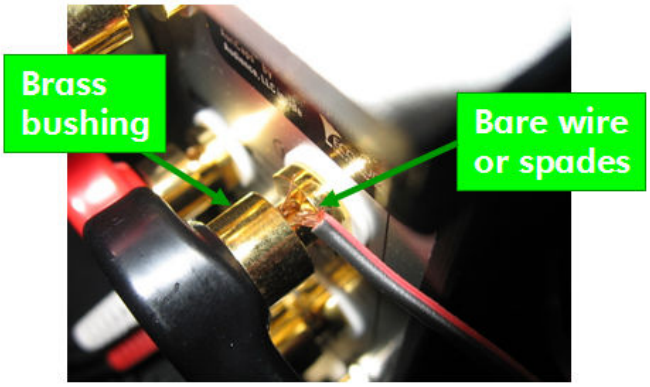
***Note**: it is possible that the black RCA input (left) will be on top. This will have no affect on sound.*

Connect your audio source to the L/R RCA input connectors. Your CD/DVD player, DAC, MP3 player, tuner, TV audio, preamp, and other inputs can be connected here. The unit supports high level inputs such as MP3 players on maximum volume.

WARNING: If you are using a subwoofer, please use the line-level subwoofer output. **Do NOT connect the high-level speaker outputs to your sub-woofer high-level inputs** and use the subwoofer amp to cross-over the high and low frequencies. With Tripath™ amps such as this one, there is a decent chance that your subwoofer amplifier will bridge the amp's speaker outputs, blowing up your Virtue amp. If you want to prevent low frequencies from reaching your main speakers, follow the instructions below about changing the main input capacitors.

You will attach speaker cables to the glorious Propeller Post™ binding posts. They support banana plugs, bare wire, and spades.

Banana plugs are simply inserted in the back of the plug. Banana plugs are the most convenient attachment option.



Bare wire can be wrapped around the post or inserted through the hole. Be sure the brass bushing is above the hole as shown. Spades and bare wire provide the opportunity for an all-copper signal path (on the TWO).

If you are using bare wire or spades, twist down the posts to make a solid connection. Check the connections again in a week to see they remain snug. If snug, they should remain that way.

You may connect speakers with an impedance of anywhere from 2 ohms to 16 ohms, without problem. Lower impedances may cause the amp to shut down; higher impedances may not have optimum frequency response. But you'll be fine with the vast majority of speakers on the market. Running the amp without speakers will not harm it.

Plug in power

Making sure that the unit is turned off, you will then plug in the power brick to your AC mains power socket. The power bricks we ship are regulated so they already have much of the circuitry that you find in many power conditioners. However, you may still want to use a power conditioner to supply smoother and more consistent current.

Turn on the amplifier

You can now depress the power switch to turn on the unit. When you do, the blue LED on the front panel will illuminate. Also, you will notice a red light momentarily behind the volume control. Seeing this light flash during startup, shutdown, and under very heavy loads (signaling clipping) is normal. If you see the red light come on often or consistently during normal listening, please consider upgrading the PSU or turning down the volume. Clipping can damage speakers.

Modding your unit

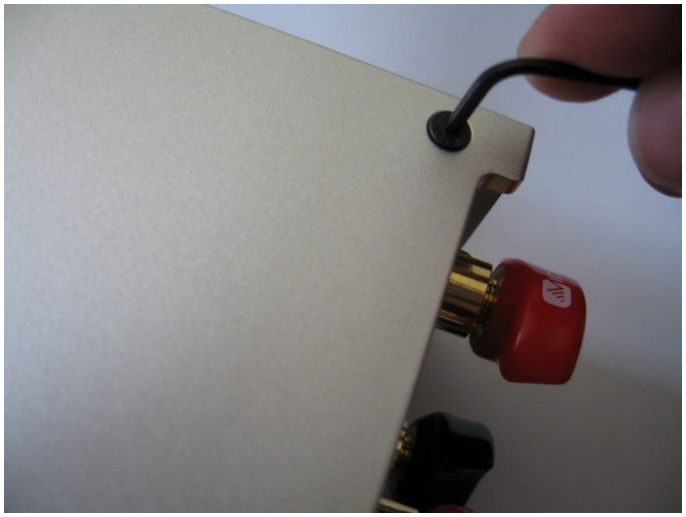
You may want to remove the wrap-around skin in several circumstances:

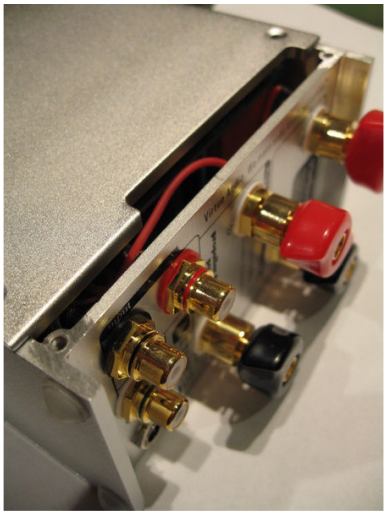
1. Curiosity.
2. Replacing the cover with another color.
3. Bypassing the POT/attenuator to turn the unit in case a pre-amp is being used.
4. Minor repairs or upgrades such as:
    a. tightening the output binding posts
    b. replacing the LED assembly
    c. replacing the fuse
    d. replacing the power switch
    e. replacing the input capacitor to implement high-pass filtering

WARNING: Before modding your Virtue amplifier, please insure that the amplifier is completely powered off and the power supply cable is disconnected from the amplifier.

Removing the Cover

To remove the cover, choose a hex-screw wrench that fits the screws snugly. Unscrew slowly, making sure not to strip the threads. When tightening, please do not over-tighten as you may damage the threads and make it difficult to remove them.

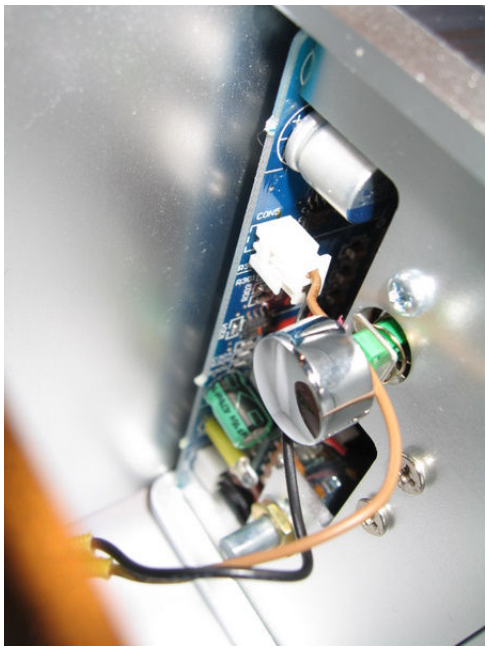


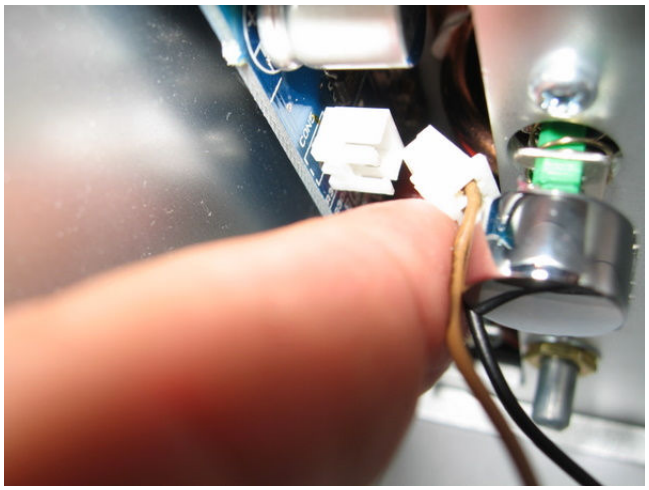


After removing the screws, spring open the shell and gently slide back, half way. Do not slide the cover off fully before unfastening the LED tether.

Unfastening the LED

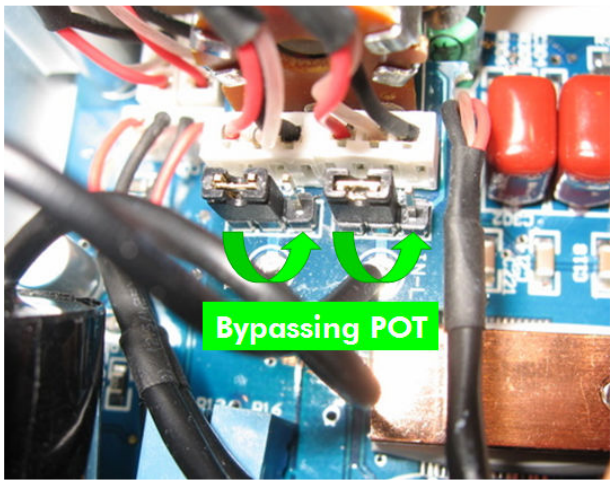
On the front side of the unit, you will find the LED tether. Using your fingers or a needle-nose pliers, pull it up from the board.





Turn the unit into a power amplifier

If you are using a pre-amplifier, there is no need to use the internal attenuator (POT) on the Virtue amp. Customers have found that by taking the POT out of the circuit, sound quality improves. This job requires moving the POT bypass jumpers.

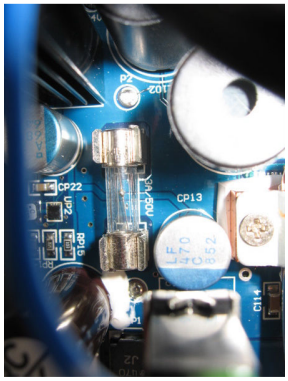


The volume control bypass jumpers are located on the end of the circuit board behind the POT. On most models of the virtue amp the jumpers will be underneath the board. A small needle nose plier will make the job easy. Simply move the jumpers to the position shown in the photo above.* If yo have not yet glued the volume knob in place, the job can be made easier by removing the 8mm nut, pulling the POT back and moving the jumpers. Then reinstall the pot.

*We recommend trying the volume in full open position with your preamp first, to be certain this works well with your system.

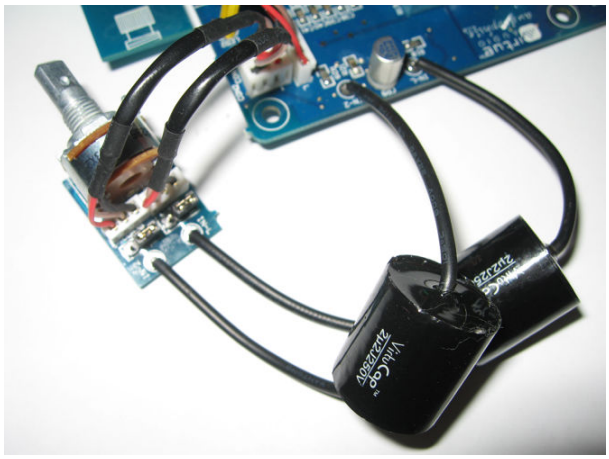
Replacing the fuse

The fuse is located on the main circuit board. Please use 3A for standard power supplies and 7A for the 130W (or higher) supply. It is possible that when you upgrade the PSU on the amp, the fuse will simply blow. This is a standard part you can find in most hardware stores. If you have trouble finding the part, email us.



Replacing the input capacitors

If you wish to replace the input caps with smaller values (see table below) to remove some bass from satellite speakers, you can solder new capacitors in place. Simply desolder the existing Virtue Caps or Auricaps and install smaller values. We recommend high quality film capacitors such as Auricap or other.



- For 80Hz high pass use 0.1uf
- For 100Hz high pass use 0.082uf
- For 120Hz high pass use 0.068uf
- For 160Hz high pass use 0.05uf

Troubleshooting

Virtue amplifiers are triple checked and burned in for 24-hours before shipment to customers and are built to provide a lifetime of use. Here are the most common problems that customers have experienced and recommended solutions.

Issue: Sound is only coming through one channel

Recommendation: The green ring on the subwoofer output jack is a quite dark green, so it may be mistaken for a black signal input jack. Please check to see that both the left and right (red/black) RCA input cables are connected to the RCA input jacks (red and black) and not the subwoofer output jack (green).

Issue: The unit will not turn off

Recommendation: The push-button on/off switch has been known to stick, internally, from time-to-time. Typically, the switch can be unstuck by physically pumping it on and off. To do this, please detach the power cable and then vigorously press the switch on and off,

between 10 and 20 times. If the switch remains non-functional, please contact us about replacing the switch.

Issue: FM reception is weaker when the radio is beside the amplifier

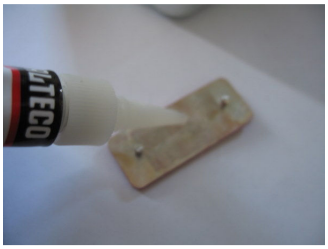
Recommendation: Please try moving the unit at least 24 inches away from FM receiver in order to reduce interference.

Issue: The left and right RCA jacks are reversed

Recommendation: Due to a silkscreen printing error, input RCA jacks are not labeled "Left" and "Right" as they are with the output speaker posts. You should find in all cases that the black input jack corresponds to the "Right" channel and the red input jack corresponds to the "Left" input source channel. Phase is correct on the amplifier.

Issue: The Virtue label fell off

Recommendation: Due to some very cold weather this winter in both shipping and storage, your "VIRTUE" label on the front of the amp may have come unglued. A drop of Super Glue will fix it back in place.



Issue: The red light behind the volume knob is flashing often

Recommendation: Seeing this light during play indicates clipping, a condition when the peaks of the signal are clipped off. This is the power limit of the amp. If you find your unit clipping often, please consider upgrading the power supply or turning down the volume. Both the ONE and TWO amplifiers will play more than 90wpc cleanly at 30v with sufficient current. The unit will drive loads as low as 2 ohms and with speakers as insensitive as 83db, we have many satisfied customers.

Issue: My propeller posts have broken free from the chasis

Recommendation: It is possible to over-tighten the posts, thereby breaking allowing them to freely rotate. If this occurs, please open up the enclosure and tighten down the posts from the inside. Also, add some super-glue or Lok-Tite™ to reduce the chance of untwisting.

Specifications

Maximum DC voltage	30v
Efficiency	~85%
Input Impedance (default: POT enabled)	18K ohm
Input Impedance (POT bypassing)	15K ohm
Minimum speaker impedance	2 ohms
Maximum speaker impedance	20 ohms
Total Harmonic Distortion (THD) @ 87wpc	<0.1%
Recommended maximum usable power source @ 30v	200w (both channels)

Warranty

Virtue Audio products are guaranteed to be free of defects for 2 years from the time of purchase. If you experience what you consider a defect, please visit the "Contact Us" section of the Virtue Audio website and submit a message with the type "Product Issue". We reply to requests within 24-48 hours. If you did not purchase the product from Virtue Audio directly, you may also contact the seller who may be able to help you faster and easier.

We keep a stock of replacement parts such as blue LEDs, power switches, and volume POTs. In some situations, it may be faster and easier for you the customer to perform the repair than to send your unit back to the dealer or Virtue in the USA. We will discuss opportunities for self-service on a case-by-case basis.

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